

Claim Listing

What is claimed is:

1. (Withdrawn) An optical polarizer film comprising a substrate having a subwavelength moth-eye structure including peaks and valleys, and an intermittent surface covering at least a portion of the substrate and providing polarization.
2. (Withdrawn) The optical polarizer film of Claim 1, wherein the intermittent surface is a light-transmissive blocking surface covering at least some of the valleys.
3. (Withdrawn) The optical polarizer film of Claim 2, further comprising a substantially transparent coating disposed on the polarizer film.
4. (Withdrawn) The optical polarizer film of Claim 2 , wherein the intermittent light-transmissive blocking surface has a thickness of about 500 angstroms.
5. (Withdrawn) A method for forming a polarizer, comprising:
 - a) providing a moth-eye structure including peaks and valleys; and
 - b) forming a light-transmissive inhibiting surface on at least some of the valleys.
6. (Withdrawn) The method of Claim 5, further comprising forming a conductive coating on the light-transmissive inhibiting surface.
7. (Withdrawn) The method of Claim 6, further comprising forming a substantially transparent coating on the polarizer.
8. (Withdrawn) The method of Claim 5, wherein the polarizer is formed by first forming the light-transmissive inhibiting surface over substantially all of the peaks and the valleys and forming a conductive coating on the inhibiting surface, the method further including

removing the light-transmissive inhibiting surface and conductive coating adjacent the peaks.

9. (Withdrawn) A polarizer comprising at least one subwavelength optical microstructure including an undulating surface that includes an intermittent light-transmissive blocking surface in at least some low areas of the microstructure.
10. (Withdrawn) The optical polarizer film of Claim 3, further comprising a conductive coating disposed on the intermittent light-transmissive blocking surface in at least some of the valleys.
11. (Withdrawn) The optical polarizer film of Claim 1, wherein the intermittent surface is a light-transmissive blocking surface covering at least some of the peaks.
12. (Withdrawn) The optical polarizer film of Claim 11, further comprising a substantially transparent coating disposed on the polarizer film.
13. (Withdrawn) A polarizer comprising at least one subwavelength optical microstructure including an undulating surface that includes an intermittent light-transmissive blocking surface in at least some raised areas of the microstructure.
14. (Previously presented) An optical polarizer film comprising a substrate having a subwavelength moth-eye structure including peaks and valleys, and a conductive light-blocking material disposed in at least some of the valleys providing polarization.
15. (Previously presented) The optical polarizer film of Claim 14, wherein the conductive light-blocking material includes a plurality of conductive particles.
16. (Previously presented) The optical polarizer film of Claim 15, further comprising a substantially transparent coating disposed on the polarizer film.

17. (Previously presented) The optical polarizer film of Claim 15, wherein the plurality of conductive particles include nanoparticles.
18. (Previously presented) The optical polarizer film of Claim 15, wherein the conductive particles are about 0.2 micrometers or smaller in size.
19. (Previously presented) The optical polarizer film of Claim 15, wherein the plurality of conductive particles include silver, aluminum, titanium dioxide, or a combination thereof.
20. (Previously presented) The optical polarizer film of Claim 15, wherein a magnetic device is used to position the conductive particles in at least some of the valleys.
21. (Previously presented) The optical polarizer film of Claim 14, wherein the conductive light-blocking material includes conductive filler.
22. (Previously presented) The optical polarizer film of Claim 14, wherein the conductive light-blocking material includes a plurality of conductive fibers.
23. (Previously presented) The optical polarizer film of Claim 14, further comprising a substantially transparent coating disposed on the polarizer film.
24. (Withdrawn) A polarizer comprising at least one subwavelength optical microstructure including an undulating surface that includes an intermittent conductive light-blocking material disposed in at least some low areas of the microstructure.
25. (Withdrawn) A method for forming a polarizer, comprising:
 - a) providing a moth-eye structure including peaks and valleys; and
 - b) forming a conductive material in at least some of the valleys.
26. (Withdrawn) The optical polarizer film of Claim 1, wherein the intermittent surface is an opaque light-blocking filler disposed in at least some of the valleys.

27. (Withdrawn) The optical polarizer film of Claim 26, further comprising a substantially transparent coating disposed on the polarizer film.

28.-31. Cancelled.

32. (Withdrawn) A method for forming a polarizer, comprising:

- a) providing a resin on a mold that forms a moth-eye structure having peaks and valleys;
- b) providing a plurality of particles in the resin; and
- c) curing the resin to form the moth-eye structure, the particles being disposed within at least some of the peaks of the moth-eye structure.

33. (Withdrawn) The method of Claim 32, further comprising providing a substantially transparent coating on the polarizer.